WINTER FOOD CACHING BY MOUNTAIN BEAVERS (Aplodomia rufa) IN A GIRDLED DOUGLAS-FIR STAND. J.P Farley and P.L. Campbell. USDA, Animal and Plant Health Inspection Service, Olympia, WA.

Girdling of basal stems and roots of Douglas-fir (Pseudotsuga menziesii) causes excessive tree mortality in managed plantations. Vegetation used by mountain beavers is being determined in a 15-year old stand with basal stem diameters of about 18 cm and canopy coverage of about 72% (SD 30%) near burrow systems prior to tree thinning. To locate food caches, 6 g radio transmitters were attached to sword fern bundles taken by mountain beavers. Cached vegetation recovered in February 1991 was compared with available surface plants within about 9 m of food caches of six burrow systems. Sword fern (Polystichum munitum), salal (Gaultheria shallon) and Oregon grape (Berberis nervosa) were the three major species of thirteen species recovered from food caches and were the dominant surface species. Respective percentages of food cache plants by weight vs ground coverage were: sword fern 34.9% (SD 25.4%) vs 36.4% (SD 20.0%); salal 32.4% (SD 20.0%) vs 47.7%, (SD 29.6%), and Oregon grape 8.5% (SD 9.5%) vs 31.8% (SD 35.0%). Percentages of sword fern and salal cached appeared closely related to their availability.